

**What is claimed is:**

1. A process for producing self-cleaning surfaces on coated textile sheets,  
5 which comprises  
the following steps of the process:
  - i.) applying hydrophobic nanostructured particles to a surface of a transfer-medium sheet,
  - 10 ii.) applying a coating composition and a textile sheet to those surfaces of the transfer medium to which the hydrophobic nanostructured particles were applied in step i.) of the process,
  - 15 iii.) heat treatment of the composite resulting from steps i.) to ii.) of the process, and
  - iv.) removing the transfer medium.
2. The process as claimed in claim 1,  
wherein  
the transfer medium has a hydrophobic surface.  
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3. The process as claimed in claim 2,  
wherein  
the transfer medium is a lamination paper.  
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4. The process as claimed in at least one of claims 1 to 3,  
wherein  
use is made of particles which have an average diameter of from 0.01 to 100  $\mu\text{m}$ .
- 30 5. The process as claimed in at least one of claims 1 to 3,  
wherein  
use is made of particles which have an average diameter of from 0.02 to 50  $\mu\text{m}$ .
- 35 6. The process as claimed in at least one of claims 1 to 5,  
wherein  
use is made of particles selected from minerals, aluminum oxide, silicates, hydrophobically modified silicas, metal oxides, mixed oxides, metal powders, pigments, and polymers.

7. The process as claimed in at least one of claims 1 to 6,  
wherein  
5 the particles have hydrophobic properties after treatment with at  
least one compound from the group of the alkylsilanes,  
fluoroalkylsilanes, and disilazanes.
8. The process as claimed in at least one of claims 1 to 7,  
wherein  
10 the coating composition has hydrophilic properties.
9. The process as claimed in at least one of claims 1 to 8,  
wherein  
15 the coating composition comprises polyvinyl chloride, acrylonitrile-  
butadiene-styrene terpolymer (ABS), polychloroprene, or  
polyurethane.
10. The process as claimed in at least one of claims 1 to 9,  
wherein  
20 in step ii.) of the process, the coating composition is first applied to  
that surface of the transfer medium to which the hydrophobic nano-  
structured particles were applied in step i.) of the process, and then  
the textile sheet is applied to this coating composition.
- 25 11. The process as claimed in at least one of claims 1 to 9,  
wherein  
in step ii.) of the process, the coating composition is first applied to  
the surface of the textile sheet, and then this composite is applied to  
30 that surface of the transfer medium to which the hydrophobic  
nanostructured particles were applied in step i.) of the process, the  
location of the coating composition being between the transfer  
medium, with its particles, and the textile sheet.
- 35 12. A coated textile sheet,  
which  
has hydrophobic nanostructured particles on at least one coating  
surface.
13. The coated textile sheet as claimed in claim 12,

which  
is produced by a process as claimed in at least one of claims 1 to 11.

- 5    14. The use of the coated textile sheet produced by a process as claimed in at least one of claims 1 to 11 for the production of clothing, of technical textiles, or of fabrics for textile buildings.
- 10    15. The use of the coated textile sheet as claimed in claim 14 for the production of rainwear or safety clothing with high visibility.
- 16. The use of the coated textile sheet as claimed in claim 14 for the production of sun-screening covers.
- 15    17. The use of the coated textile sheet as claimed in claim 14 for the production of protective tarpaulins, tenting, truck tarpaulins, or other protective coverings.